Journal of Circular Economy
https://doi.org/10.55845/NQIR7494 Volume 3, Issue 1

Research paper

Durkheim, Individualism, Human Flourishing and the Law: An Appraisal of Social Solidarity and Circularity in the Construction Sector

Jonas Voorter[1*], Joeri van Vliet[2]

Handling Editor: Julian Kirchherr

Received: 30.09.2024 / Accepted: 14.01.2025

Abstract

The transition to a circular economy (CE) in the construction sector requires strong collaboration among stakeholders. This paper examines the potential of Émile Durkheim's theory of social solidarity and Gregory Alexander's human flourishing framework to foster cooperation within the construction sector and beyond. By linking Durkheim's organic solidarity with Alexander's concept of interdependence, we propose that sustainability goals can align with individualistic tendencies through a shared focus on human flourishing. This approach reframes sustainability as a path to collective and individual well-being, emphasizing the interconnectedness of stakeholders in circular construction practices. Furthermore, the paper explores embedding this mindset into legislative frameworks via soft law, legal nudging, and explicit statutory references. This interdisciplinary analysis bridges sociology, legal studies, and sustainability science, offering a new narrative to integrate human flourishing into societal and legal systems, thereby advancing circularity and fostering a sustainable future.

Keywords: Circular Construction · Social Solidarity · Durkheim · Human Flourishing Theory

1. INTRODUCTION

Constructing buildings is not easy. It is an activity that requires the expertise of a significant number of actors,[3] in which various materials and products are put together, each with their own characteristics and lifespan.[4] Moreover, construction activities are regulated by numerous legislative frameworks which are in place to ensure qualitative results and an adequate allocation of risks and responsibilities.[5] On top of the existing complexity of construction activities, recent years have shown an increased interest in and push for sustainable development (Van Gulijk & Voorter, 2023). The construction sector has a responsibility to become more sustainable in order to give the European Union a chance at realizing its ambitious climate targets as it is a sector that uses a substantial number of raw materials and generates diverse and numerous waste streams.[6] To align construction activities with our sustainability ambitions, tools are needed. The circular economy (CE) is deemed a tool with exciting potential in that regard.

CE can be defined as an economic system that represents a change of paradigm in the ways that human society – both business models and consumer behavior – is interrelated with nature. It aims to replace the 'end-of-life' concept with reducing, alternatively reusing, recycling and recovering resources, energy and materials. CE operates

1 Hasselt University, Martelarenlaan 42, 3500 Hasselt
2 Tilburg University, Warandelaan 2, 5037 AB Tilburg
*Corresponding author: jonas.voorter@uhasselt.be
3 Clearly illustrated in European Commission (2023).
4 E.g. Layers of brand. Mentioned in Cihan et al. (2021).
5 Driven by, among other things, European legislation, the Belgian (Flemish region) handbook on construction law mentions over 30 legal themes that have an impact on the construction sector. See Deketelaere et al. (2022).
6 The European Commission considers the construction sector as a crucial sector for this circular transition, see European Commission (2020).

at the micro level, meso level and macro level in order to accomplish sustainable development which implies creating environmental quality, economic prosperity and social equity, to the benefit of current and future generations (Voorter et al., 2021, p. 26).

As the definition suggests, a paradigm shift will need to take place to implement CE and, by doing so, create a more sustainable society. This means fostering stronger cooperation and solidarity not only across society as a whole but also specifically within the construction sector, where all stakeholders will need to work closely together to achieve circular goals as CE's principles inherently rely on interconnectedness and shared responsibility (Van Gulijk & Voorter, 2023; Leising et al., 2018). For example, designing buildings with disassembly and reuse in mind demands collaboration between architects, engineers, material suppliers, and contractors. Similarly, closing waste loops requires partnerships between producers, waste managers, and regulators. Nevertheless, the lack of sincere and meaningful cooperation remains one of the biggest obstacles achieving circular ambitions within construction practices (De Wolf et al., 2023).[7]

The concept of solidarity offers a valuable lens through which to address this challenge. Émile Durkheim, a French social scientist, devoted a great deal of his research to the concept of solidarity. Durkheim emphasized solidarity as a crucial factor in holding societies together, particularly in navigating changes in social organization and collective goals (Mishra & Rath, 2020). The CE's role in the transition towards a sustainable society (including social aspects) and its emphasis on shared benefits and responsibilities mirrors Durkheim's ideas, suggesting that fostering solidarity is not just beneficial but essential for a successful transition to circular construction and a sustainable society.

Building on Durkheim's works, this article explores how solidarity functions within the (circular) construction sector and society. More specifically, this research aims to examine how a solidarity-focused mindset can bridge the gap between the need for close cooperation in circular societies and construction on the one hand, and our current individualistic (and consumption-minded) nature on the other. This paper proposes that human flourishing theory can function as an interesting liaison (*conscience collective*) between these two seemingly irreconcilable points of view.[8] By reframing sustainability as a path to collective and individual well-being, human flourishing theory provides a powerful tool to inspire solidarity and, consequently, collaboration.

In addition to exploring this theoretical framework, this paper addresses the practical challenge of embedding human flourishing into legal structures. After all, we are legal scholars. To do so, this research uses a (legal) doctrinal research method with an interdisciplinary twist, combining insights from sociology, legal studies and sustainability science. Through a review of national and international academic literature on the transition towards a circular economy in construction[9], this research will a) introduce the concept of 'solidarity' into the circularity (research) narrative thereby contributing to the social aspect of the sustainability transition[10] and b) provide a foundation for proposing pathways to embed human flourishing into legislative frameworks to further advance circular goals in the construction sector.

This paper is structured as follows: the theory of Durkheim on social solidarity is discussed in part 2 alongside a discussion on the individualistic nature of our current society and its clash with the idea of social solidarity in construction. Part 3 explores the idea of 'human flourishing' as a possible narrative to drive the transition towards a circular and sustainable construction sector forward. We'll end the paper with an exploration of pathways to practically and legally embed the idea of human flourishing (part 4 and 5) and some concluding remarks (part 6).

7 The Flemish Public Waste Agency (OVAM) also considers the need for more cooperation as one of the key drivers for a more circular construction value chain: (OVAM, 2022, p. 25)

8 Considering the social dimension of construction and housing policies, see Paidakaki & Lang (2021). Examples are 1) sense of community and social cohesion, 2) green spaces and urban planning; 3) access to real estate and services; 4) collaborative housing; etc. We believe that human flourishing can have an impact on these indicators.

9 We used our earlier research work (e.g. Voorter, 2024, p. 350) as a steppingstone and expanded on it with (academic) literature focused on Durkheim's theory, human flourishing theory and collaboration in the construction value chain.

10 The link between circular economy and the social aspect of sustainability is not widely recognized and unexplored in research, see Repp et al. (2021).

2. THE THEORY OF SOCIAL SOLIDARITY

2.1 Theoretic Model by É. Durkheim

The concept of social solidarity is one of the main topics of French sociologist Émile Durkheim's research. Durkheim set out to demonstrate that a lack of care for public interests would be detrimental to social life (Thilakarathna, 2019, pp. 307-309). He even reasoned that a society lacking a minimal degree of solidarity would ultimately cease to exist (Khairulyadi et al., 2022, p. 83). This idea is reiterated by Hechter (2001), who describes solidarity as the binding force that unites individuals based on normative obligations that facilitate collective action and social order. Social solidarity thus refers to the cohesion between individuals in a society that ensures social order and stability (Mishra & Rath, 2020). In his book *The Division of Labour in Society* (1893), Durkheim distinguishes two types of social solidarity: mechanical solidarity and organic solidarity.

2.1.1 Mechanical Solidarity

According to Durkheim (1984), mechanical solidarity is present in (primitive) societies where its citizens share a set of common beliefs and standards (p. 22). This shared belief system creates a *conscience collective*, which enables members of the society to live and work together harmoniously (Durkheim, 1984; Hart, 1967). In such societies individuals are characterized by the fact that they differ very little from each other. Thilakarathna (2019, p. 310) illustrates this with the example of a farming community where everyone is involved in the agricultural process. Because the members of this community have so much in common, they also share similar views about life and forming a strong *conscience collective*. In societies characterized by mechanical solidarity, the individual is not seen as separate from the group. Rather, individuals are subordinated to the solidarity of the group (Gofman, 2018, p. 29).

2.1.2 Organic Solidarity

Mechanical solidarity is primarily associated with *simpler* or more *primitive* societies (e.g. the farming community mentioned above) (Hart, 1967, p. 5). Once societies start evolving, interactions between its members become more complex. The moment individuals stop working together to pursue more diverse and specialized activities, they lose their shared beliefs and values that once unified them (Thilakarathna, 2019, p. 310). According to Durkheim, this increasing division of labour gives rise to another form of solidarity; *organic solidarity* (Khairulyadi et al., 2022, p. 85). The underlying idea here is that the specialization of labor among society's members naturally leads to systematic cooperation, as individuals work to fulfill their respective roles and interests (Khairulyadi et al., 2022, pp. 85-86). It is this cooperation that should bind society together (Evans jr. & Evans, 1977, p. 31).

In a society characterized by *organic solidarity,* the *conscience collective* is not as 'strong' as in societies with *mechanical solidarity,* as it is replaced by systematic cooperation (Gofman, 2018, p. 29). However, following Durkheim, a society based on organic solidarity would still need some form of *conscience collective.* Durkheim (1973, p. 13) explains it as follows:

A society in which there is pacific commerce between its members, in which there is no conflict of any sort, but which has nothing more than that, would have a rather mediocre quality. Society must in addition, have before it an ideal towards which it reaches.[11]

To further illustrate this point, Thilakarathna compares the ideas around solidarity to the human body. All the organs have a specific function. The lungs depend on the heart and the heart depends on the lungs (Thilakarathna, 2019, p. 311). The human body is thus characterized by systematic (and organic) cooperation. Nonetheless, the organs need a common objective to solidify their cooperation: keeping the body alive.

2.2 Application to the Circular Construction Sector

Today, our society is highly complex. We live in a globalized world characterized by a constant flow of goods, services, capital, and people. Smaller and closed communities where people are so alike that they are characterized by mechanical solidarity are rare or even non-existent. Our society fits better in the model of organic solidarity as it is characterized by systematic cooperation. As will become clearer from the part below, the construction sector is

11 As mentioned in Hawkins (1979, p. 158).

also characterized by systematic cooperation. Moreover, one could even argue that the construction sector is a little society of its own. However, the question remains to which extent systematic cooperation translates into genuine (organic) solidarity, needed to embed sustainability and circularity considerations.

2.2.1 The Circular Construction Process

The construction process is characterized by a succession of distinct phases and the coming together of many different construction actors, each with their own interests, goals, and expectations. In a 2023 report around the application of circular ideas in the construction sector ecosystem, the European Commission depicted the construction process as follows:

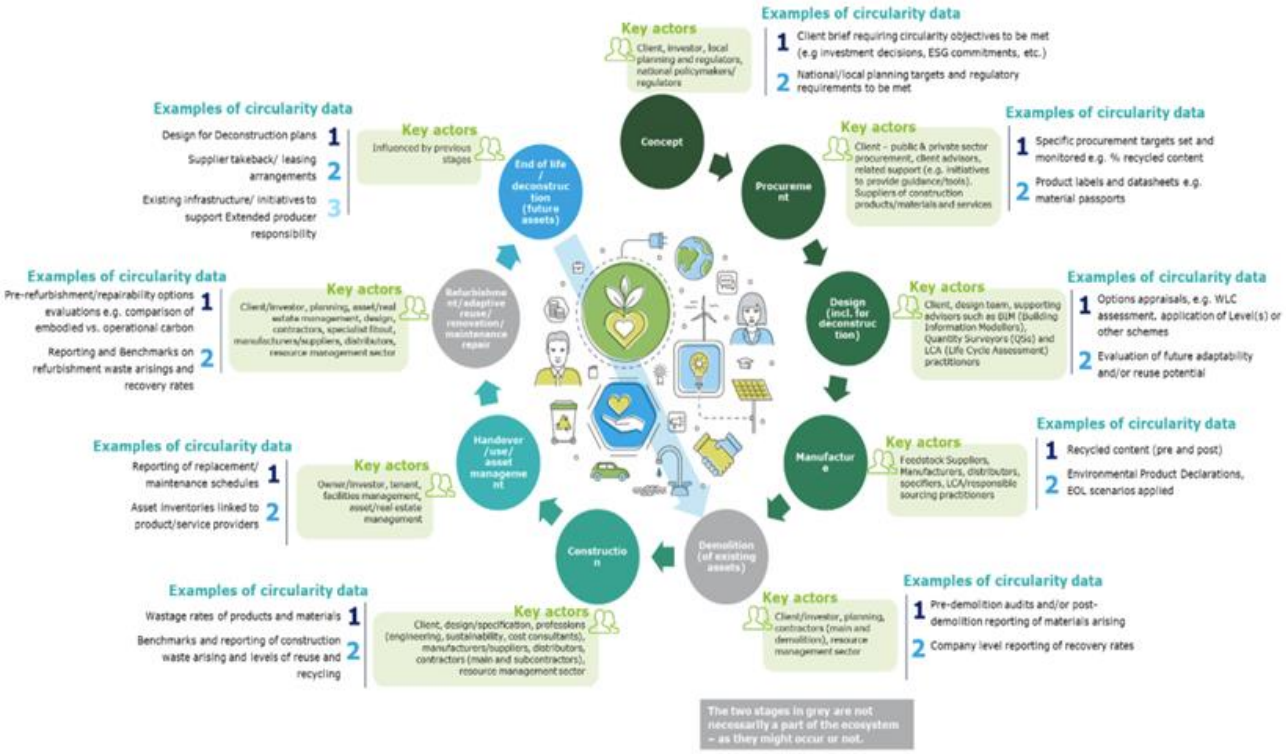


Figure 1. Phases of the Construction Process (European Commission, 2023, p. 4). For Full-Size Image, See Appendix

The European Commission ultimately distinguishes nine different phases in a construction process: 1) conceptualization (read: preparation), 2) tendering, 3) design, 4) material production, 5) demolition of existing elements/buildings (if applicable), 6) construction, 7) use, 8) repair/reuse/renovation/etc. (if applicable) and finally 9) the end-of-life phase.

In a circular construction economy, it is essential to establish strong connections between the different life phases of a building (Leising et al., 2018, p. 977). By doing so, we can fully consider the entire life cycle of a structure. Achieving this requires close collaboration among various building actors across distinct phases. However, the increasing number of building actors adds complexity. In addition to the traditional roles of clients, architects, contractors, materials producers/suppliers, licensing authorities, and insurers, quality assurance officers have recently become part of the building process in the Netherlands (Rijksoverheid, n.d.). Furthermore, circular construction projects introduce new roles, such as materials scouts, waste consultants, and materials managers.

2.2.2 Analysis

Seeing how the circular construction sector is characterized by a diversity of actors and an inherent division of labour in construction practices, one would expect to see Durkheim's theory of organic solidarity at play. However, despite the division of labour obliging stakeholders such as owners, contractors, architects, and engineers to

collaborate, this does not necessarily lead to a great amount of solidarity. Instead, construction is often still seen as a conflict model in which meaningful and sincere cooperation and an adequate allocation of risks and responsibilities is scarce (Voorter, 2024, pp. 17-18). For example, owners fear that contractors will request additional work, leading to increased costs. Architects may hesitate to make innovative design choices, fearing accountability/liability. Contractors, in turn, perceive project owners' expectations as (financially) unrealistic.

This lack of (organic) solidarity and cooperation could be explained by the fact that our societies and their inhabitants have a profound individualistic mindset. Individualism can be defined as the idea that freedom of thought and action for each person is the most important quality of a society, rather than shared effort and responsibility ("Individualism", n.d.). Western European countries are characterized as particularly individualistic. This is clearly illustrated by the ranking published by the think tank Hofstede Insights (n.d.). High up in the ranking are the Netherlands (100), Belgium (81), Germany (79) and France (74). Other European countries have a lower individualism score such as Bulgaria (50), Poland (47), Romania (46) or Serbia (42).

To conclude this section, the division of labour in construction practices within western European societies does not lead to the desired (social) solidarity. Following Durkheim, this may be attributed to the absence of a *conscience collective*, a shared objective or ideal. Durkheim argued that even in societies characterized by organic solidarity a common objective/ideal is necessary *(supra*). Within the scope of this paper, we do not intend to argue that society should abruptly shift away from individualism toward a more collective mindset (such a transformation seems like an insurmountable challenge). Instead, we propose a theoretical/philosophical framework that can combine the need for a common ideal (the *conscience collective*) with our current individualistic nature to create a sustainable society. This framework is found, in our view, within human flourishing theory.

3. HUMAN FLOURISHING AS 'NEW' CONSCIENCE COLLECTIVE

Realizing a *conscience collective* in an individualistic society seems like a difficult task. Yet, impossible it is not. Whilst there are probably many avenues to approach such a daunting task, for now we would like to focus on just one: the theory of human flourishing as set out by Gregory Alexander. Alexander presents his theory of human flourishing as a property law theory. According to him, human flourishing theory provides the best account of the value constitution that underpins the structure of modern property law (Alexander, 2020, p. 203). However, this research argues that his theory has broader applications. Human flourishing should not be limited to underpinning property law but should extend to the entirety of legal frameworks and potentially all social interactions. This paper's analysis centers on Alexander's framework because of its unique contribution to understanding the relationship between individuals, communities, and shared obligations. While Aristotelian virtue ethics and its emphasis on telos and the public good provide the foundational philosophical backdrop, Alexander's work builds a bridge between these classical ideas and contemporary legal and societal challenges. His theory offers a pragmatic pathway for integrating the concept of human flourishing into tangible frameworks, such as law and policy, and thus will be the focus of this paper. In the next paragraph we will briefly touch upon Aristotle to quickly move on to Alexander's human flourishing theory.

Human flourishing in its essence comes down to living 'the good life'. Within western thinking the idea of human flourishing can be traced back to Aristotle's Nicomachean Ethics. To oversimplify, for Aristotle (2019) flourishing is achieved through the cultivation of virtues. Nowadays, one might be eager to think they are living the good life when they have enough resources to satisfy their personal preferences. However, Alexander (2018, 2020) offers a different perspective. Building on the work of Amartya Sen (1999), Alexander's concept of the good life is based on a person's capabilities instead of their possessions. Each person needs a basic set of capabilities to live a fulfilling life. One might want to debate which capabilities are essential, Alexander has his own list, but for us these capabilities include health, education, personal security, autonomy, social connections, meaningful work, access to resources and (from a sustainable development perspective) a clean environment.

Understanding what constitutes a good life is the first step in understanding Alexander's human flourishing theory. The next question is how to achieve this good life. How does one obtain the essential capabilities to live a fulfilling life? Building upon the works of Charles Taylor, human flourishing theory recognizes that individuals cannot develop the required capabilities on their own (Alexander, 2018, p. 61).[12] We are dependent on our teachers

12 Also see Taylor (1985).

for our education; meaningful work in most cases requires a thoughtful employer. Likewise, more abstract capabilities such as one's autonomy are only realized when others respect personal boundaries. The dependence on others can also be clearly seen when it comes to a clean environment, as maintaining air and water quality, managing waste, and reducing pollution all require collective efforts and cooperation.

Coming to terms with this dependence is the core of Alexander's human flourishing theory. This recognition is also why we believe that human flourishing theory could serve as a bridge between individualism and the need for collaboration and solidarity. By fully internalizing the dependent nature of the human condition, human flourishing can turn individualistic reasoning into a call for collective effort and cooperation. Let us elaborate.

Each person has their own goals and dreams in life. This inherent individualism is something that we just can't deny. Yet, for me as an individual to reach my dreams and goals I need certain capabilities. For example, if I want to become a rich and successful researcher, I first need a good education and later in life security that my amassed riches won't just be taken away from me. However, as human flourishing theory explains, I am reliant on others to obtain these capabilities. To get the education I need to become a researcher, I will have to rely on my teachers. Likewise, if I want security for my wealth, I need others to respect my property rights (which is often ensured by a stable government). Thus, to flourish, I need certain capabilities that only others can provide. However, for others to provide me with these capabilities they themselves also need certain capabilities. Therefore, if I want to have certain capabilities (which I do because they are required for me to reach my goals in life), I must ensure that others are also in a position to obtain the same capabilities (Alexander, 2020, pp. 210-211).

To summarize, the crux of Alexander's human flourishing theory is this: It is within my self-interest to flourish, but to realize this flourishing I am dependent on others (society as a whole) to provide me with the basic capabilities to flourish. Therefore, it is in my self-interest to maintain a society that allows all to flourish (as I cannot flourish on my own). The strength of Alexander's human flourishing lies in the fact that it is able to transform an individualistic outset into what almost reads as a social obligation to take care of each other. It demonstrates that no one can flourish alone, and that it is in everyone's self-interest to cooperate and support one another. The next part will explore how this can be put into practice.

4. PRACTICE

Alexander (2018) presents his human flourishing theory as a property law theory.[13] He argues that the fundamental reason for having ownership rights is that individuals need certain resources to develop their capabilities. However, because property owners rely on others to flourish, they are obligated to use their property to also support the capabilities of others. In practice, this may require property owners to provide material resources to others to help them develop their capabilities (Alexander, 2020, p. 211). Similarly, if my ownership of a resource denies someone access to a resource essential for their capabilities, my (social) obligation requires me to grant them access.[14] Thus, Alexander's theory imposes certain obligations on property owners, restricting their freedom to ensure the flourishing for all. Although Alexander limits himself to property law, we think that the ideas found in his human flourishing theory could benefit all areas of life and law.

4.1 Flourishing in Construction

One of the main aspects of human flourishing theory is the idea that we are all dependent on each other to develop certain capabilities and thus to flourish. This dependency can also clearly be seen in the construction sector. For instance, the successful completion of a construction project relies on a well-coordinated effort among architects, engineers, laborers, and suppliers. Each role is dependent on the capabilities of the others. An architect relies on accurate engineering calculations, a laborer depends on the timely supply of materials, and a construction manager depends on the efficiency and reliability of the entire team. In the context of circular construction, the idea of interdependence becomes even more pronounced simply by the fact that more (specialized) actors are involved (*supra*).

This interdependence is not new, we already pointed this out in the part on systematic cooperation and organic solidarity. The innovation lies in the second main aspect of human flourishing theory. That is the realization that if

13 Also on human flourishing and property see Akkermans (2021, 2022).
14 See for examples Alexander (2018).

I want to flourish in a highly dependent society, I will need to use my capabilities to put others in a position to be able to flourish, as I cannot flourish on my own. For instance, for a laborer to perform effectively, they need proper training, fair wages, and safe working conditions. In practice this is reflected in the (legal) requirement for construction companies to adhere to safety regulations and to provide continuous education and support for their employees.

Likewise, within the circular construction sector, to flourish I am dependent on others and therefore I need others to flourish as well. For instance, as a construction manager focusing on circular construction, I need access to materials that can be easily reused or recycled, innovative design strategies that facilitate deconstruction, and knowledge of best practices in sustainable construction. For this I am dependent on the contributions of various stakeholders. Material suppliers must develop and provide sustainable and reusable (or at least recyclable) materials. Architects and engineers must design buildings with circularity in mind, ensuring that structures can be easily deconstructed without losing the value of materials. Waste management professionals will need to be able to process and repurpose construction waste efficiently.

Within the circular construction sector, each actor is interconnected and dependent on the other actors. If we are to apply Alexander's human flourishing theory in the context of the construction sector the main thesis would read as follows: It is within my self-interest to flourish, but to achieve this, I rely on the entire construction ecosystem to provide me with the basic capabilities to succeed. It is thus within my self-interest to assure that others flourish as well.

This way of organizing construction activities can lead to more fruitful cooperation and solidarity. However, it will not necessarily lead to the inclusion of more circular ambitions in construction projects. Currently, the circular economy paradigm in construction is still struggling with the supply – demand paradigm.[15] Supply of circular solutions and business models is still quite low, while demand for solutions with circular potential is still lacking (e.g. when awarding public contracts). With the introduction of human flourishing, the basic ingredients are present to start building more circular, but to truly start this paradigm shift, we also need human flourishing as a *conscience collective* on a societal level. At this moment, this mindset is not present with stakeholders in the construction value chain nor with project owners. As a response, we believe that legislation has a part to play to guide all involved stakeholders towards a mindset which highlights circular practices, human flourishing and solidarity throughout the value chain (*infra*).

4.2 Flourishing in Society

Human flourishing theory is not only a new perspective on the relations within the construction sector (as set out in 4.1). Human flourishing theory also must be applied to the role that circular construction plays within society. The fact that everyone needs to be able to flourish leads, in the context of construction, to the conclusion that sufficient space and materials need to be available at the end of the day. Thus, when making choices about space and materials one needs to keep in mind that if I want to flourish, I need to make sure that others also have enough space and materials to flourish. Making the right choices is not only the responsibility of the actors within the construction sector, but it will also be up to (property and project) owners to make choices which enable others to flourish. After all, as human flourishing theory stipulates, it is in the self- interest to put others in a position to flourish.

As mentioned above, we are aware of the fact that as of right now project or property owners are not likely to ask for 'circular solutions' when thinking about their construction projects. However, the introduction of 'human flourishing' in our society, culture, mindset and legal frameworks (*infra*), has the potential to lead project and property owners towards projects that do have 'human flourishing' in mind and are circular in nature as well, e.g., thinking about the flexible use of space, the number of rooms that are needed, the use of reused/recycled materials, design for disassembly, etc. When this is the case, the human-flourishing perspective in society will serve as a catalyst that spurs the human flourishing mindset between construction actors and therefore creates a pathway towards circular solutions as well as a more profound form of solidarity. This creates the perfect atmosphere for circular economy practices to thrive and 'flourish'. In that way, both human flourishing (social) and circular

15 This became apparent in a recently concluded research project for the Flemish government in which author Voorter was responsible for the legal analysis: (Debacker et al, 2023, p.7)

economy (economy, ecology) provide us with the necessary components for a more sustainable society and construction sector.

5. LEGAL TRANSLATION

Human flourishing theory holds that it is in my self- interest to put others in a position to flourish. In this way individualism can be turned into a conscience collective that fosters solidarity and can lead to a more sustainable society. However, the belief that helping others flourish serves one's self-interest is not yet a widespread conviction. For example, homeowners rarely seek approaches that prioritize the flourishing of others, in the sense that most often than not they will not ask for circular solutions (*supra*). To internalize the idea that it is in one's self-interest to help others flourish, legal instruments could play a crucial role.

There are various ways in which human flourishing theory, as a *conscience collective*, can be incorporated into legislative frameworks. We highlight three possible pathways:

1. Soft law (information, terms and conditions);
2. Legal *nudging* practices;
3. Explicit reference in legislation

Eventually, a mix of the three above mentioned strategies will be necessary to truly incorporate human flourishing in the mindset of construction actors and house owners alike. For example, general terms and conditions for contractual relationships between construction actors might be able to play a role.[16] Terms and conditions could introduce the principle of human flourishing into the business activities of various construction actors.[17] In that way the contractual relationships between actors (the interdependency because of organic solidarity) is used as a means to implement the *conscious collective* of human flourishing.

However, these soft/voluntary initiatives will probably have to be complemented by stronger legal initiatives. Two pathways exist: we can implicitly *nudge* people to construction that ensures human flourishing and circularity, or we make it explicit. We believe that nudging with legislation can already produce the desired effects. E.g. in permitting procedures, a permit could be denied if insufficient consideration has been given to resource consumption or the way the building can be re- or deconstructed at the end of its life cycle. There is no explicit reference to the need to let other people flourish[18], but it will have that effect thereby contributing to the overall policy aim to establish a sustainable society.[19]

As urban planning is mostly regulated on the national level within the context of the European Union, the Member States should take up this responsibility and align their permitting procedures to facilitate collaboration, human flourishing and circular practices. Reference could be made to art. 1.1.4 Flemish Urban Planning Codex (2009) with mentions that:

> Spatial planning aims at sustainable spatial development in which space is managed for the benefit of the present generation without compromising the needs of future generations. This involves simultaneously balancing the spatial needs of different social activities. Consideration is given to spatial carrying capacity, environmental impact and cultural, economic, aesthetic and social consequences. In this way, spatial quality is pursued.

This legal provision looks promising but in a recent study, Gruyaert (2024) found that the amount of progress on circularity and sustainability in construction projects largely depends on the willingness of the authorities deciding on permits to take such elements into account. They have a significant amount of discretionary power to decide which elements are important to address when deciding on the permit for a particular project.

16 For example, Van Gulijk et al. (2024) have already reviewed the inclusion of sustainability and circularity considerations in standard contracts (construction teams) in the Netherlands.

17 In the Netherlands, such principles could – for example - be introduced in the terms and conditions applicable in the relationship project owner – architect (DNR, 2011, https://www.bna.nl/documenten/dnr-2011-rechtsverhouding-opdrachtgever) or the relationship project owner – contractor/integrated team (UAV (2005) / UAV-GC (2025), https://www.pianoo.nl/nl/sectoren/gww/inkopen-gww/contracteren/uniforme-administratieve-voorwaarden-uav-en-uav-gc).

18 I.e. leave enough resources and space for them.

19 Both on an ecologic, economic and social level.

Some kind of 'nudging' could also work in the public sphere, e.g. by implementing a duty to motivate in public procurement legislation with regard to resource consumption and land use. Public authorities are the largest consumers in Europe. Within the European Union, public authorities spend around 14% of their GDP to public contracts (European Commission, 2017).[20] Directive 2014/24/EU on public procurement[21] explicitly mentions that Member States have the possibility to prohibit or restrict the use of price or cost as a sole criterion to assess the most economically advantageous tender in order to encourage a greater quality orientation of public procurement.[22] The Netherlands has made use of this possibility by including a duty to motivate the use of the price- or cost-criterion as the sole award criterion in a public tender (*Aanbestedingswet*, 2012, Artikel 2.114 lid 4). This creates an incentive for public authorities to also focus on qualitative criteria (such as sustainability, circularity, cooperation, etc.) when awarding a contract as a duty to motivate is seen as a hindrance by public authorities (risk of judicial proceedings).

Although this research already pointed out some possible avenues, further research is necessary to examine in detail how legislative frameworks can further implement the idea of human flourishing within construction practices and societal interactions.

6. CONCLUDING REMARKS

This paper explored the integration of Durkheim's theory of social solidarity and Alexander's human flourishing theory into the circular construction sector. The construction industry is characterized by cooperation among a diverse range of actors. However, our current individualistic mindset often hinders true solidarity and cooperation thereby creating an obstacle for circular practices and slowing down the transition towards a more sustainable society. By embedding the principles of human flourishing into both societal and legal frameworks, we can create a *conscience collective* that encourages collaboration, sustainability and shared responsibility. This shift has the potential to not only transform the construction industry but society as a whole.

As legal scholars, we believe there are various ways in which human flourishing theory, as a *conscience collective*, can be incorporated into legislative frameworks. We see three possible pathways: 1) Soft law (information, terms and conditions); 2) Legal *nudging* practices within the scope of, e.g., permitting procedures or public procurement; and 3) an explicit reference of the human flourishing objective in legislation.

We encourage other researchers to further explore the potential link between human flourishing and circular economy practices to establish a more sustainable society as well as to elaborate on the best possible implementation of the human flourishing theory within our legislative frameworks, on all policy levels.

20 See additionally, https://digital-strategy.ec.europa.eu/nl/library/how-italy-portugal-and-norway-collaborated-digitalise-eu-public-procurement

21 Directive 2014/24/EU of 26 February 2014 on public procurement, OJ 28 March 2014, L.94/65 and following.

22 Consideration 90 Directive 2014/24/EU.

ACKNOWLEDGEMENTS

We would like to thank the reviewers of this paper for their invaluable insights. Next, we'd also like to thank Prof. dr. Reinout Wibier for his initial remarks and the thoughtful suggestions and Fenna van der Zanden for the final edits.

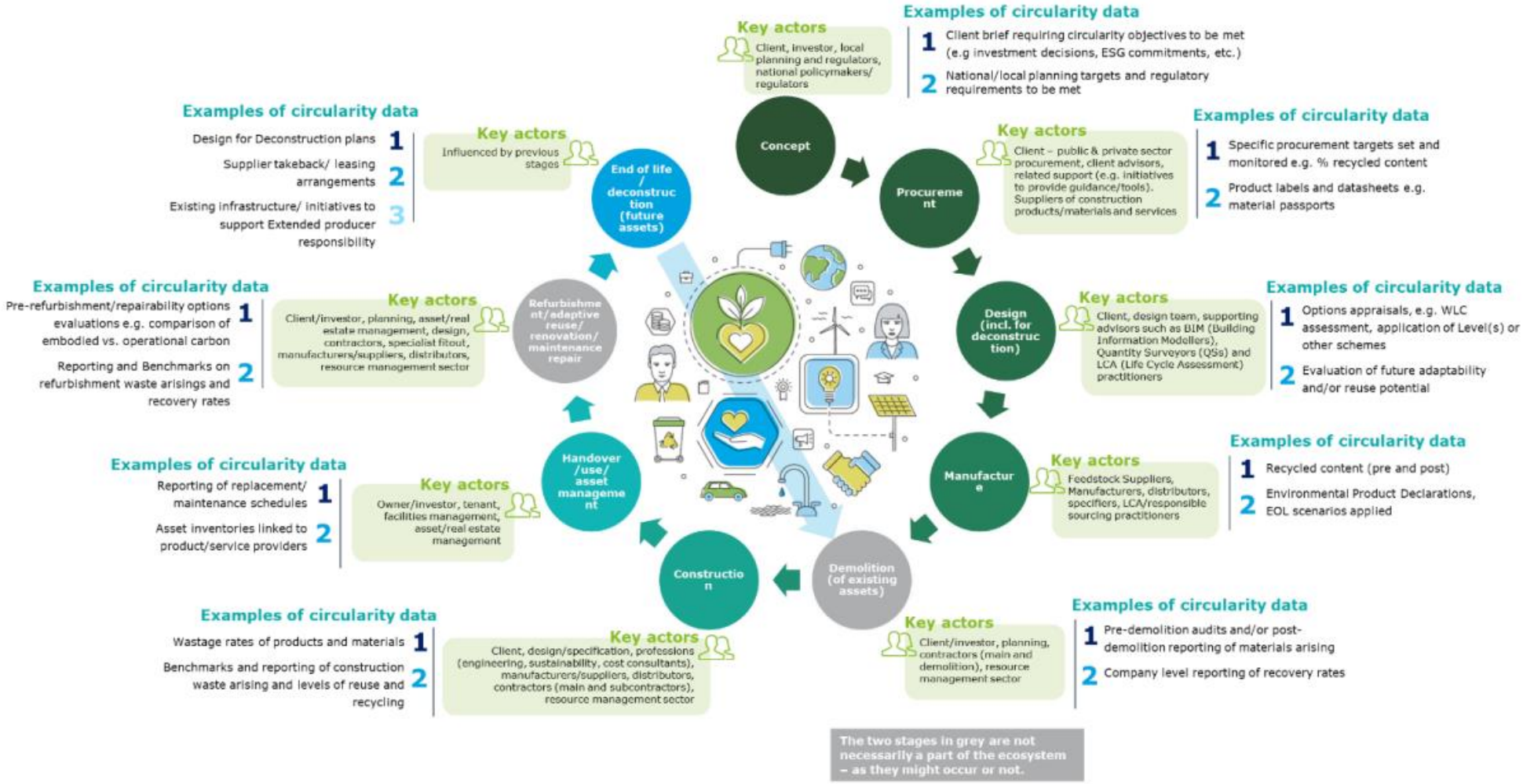
AUTHOR CONTRIBUTIONS

Jonas Voorter: conceptualisation, methodology, writing, review and editing.
Joeri van Vliet: conceptualisation, methodology, writing, review and editing.

DECLARATIONS

Competing interests The authors declare no competing interests.

APPENDIX


Concept
Key actors
Client, investor, local planning and regulators, national policymakers/ regulators
Examples of circularity data
1 Client brief requiring circularity objectives to be met (e.g investment decisions, ESG commitments, etc.)
2 National/local planning targets and regulatory requirements to be met
Procurement
Key actors
Client – public & private sector procurement, client advisors, related support (e.g. initiatives to provide guidance/tools). Suppliers of construction products/materials and services
Examples of circularity data
1 Specific procurement targets set and monitored e.g. % recycled content
2 Product labels and datasheets e.g. material passports
Design (incl. for deconstruction)
Key actors
Client, design team, supporting advisors such as BIM (Building Information Modellers), Quantity Surveyors (QSs) and LCA (Life Cycle Assessment) practitioners
Examples of circularity data
1 Options appraisals, e.g. WLC assessment, application of Level(s) or other schemes
2 Evaluation of future adaptability and/or reuse potential
Manufacture
Key actors
Feedstock Suppliers, Manufacturers, distributors, specifiers, LCA/responsible sourcing practitioners
Examples of circularity data
1 Recycled content (pre and post)
2 Environmental Product Declarations, EOL scenarios applied
Demolition (of existing assets)
Key actors
Client/investor, planning, contractors (main and demolition), resource management sector
Examples of circularity data
1 Pre-demolition audits and/or post-demolition reporting of materials arising
2 Company level reporting of recovery rates
Construction
Key actors
Client, design/specification, professions (engineering, sustainability, cost consultants), manufacturers/suppliers, distributors, contractors (main and subcontractors), resource management sector
Examples of circularity data
Wastage rates of products and materials 1
Benchmarks and reporting of construction waste arising and levels of reuse and recycling 2
Handover /use/ asset management
Key actors
Owner/investor, tenant, facilities management, asset/real estate management
Examples of circularity data
Reporting of replacement/ maintenance schedules 1
Asset inventories linked to product/service providers 2
Refurbishment/adaptive reuse/ renovation/ maintenance repair
Key actors
Client/investor, planning, asset/real estate management, design, contractors, specialist fitout, manufacturers/suppliers, distributors, resource management sector
Examples of circularity data
Pre-refurbishment/repairability options evaluations e.g. comparison of embodied vs. operational carbon 1
Reporting and Benchmarks on refurbishment waste arisings and recovery rates 2
End of life / deconstruction (future assets)
Key actors
Influenced by previous stages
Examples of circularity data
Design for Deconstruction plans 1
Supplier takeback/ leasing arrangements 2
Existing infrastructure/ initiatives to support Extended producer responsibility 3
The two stages in grey are not necessarily a part of the ecosystem – as they might occur or not.

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